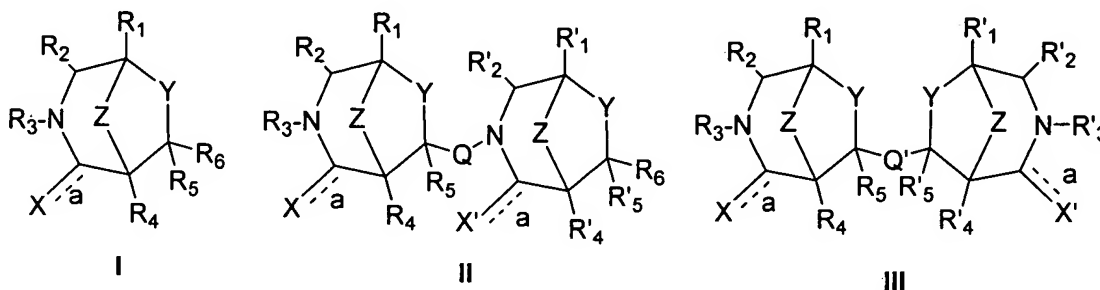


AMENDMENTS TO THE CLAIMS

1-21. (Cancelled)

22. (Currently Amended) A pharmaceutical composition comprising as active principle at least one among the 3-aza-bicyclo[3.2.1]octane derivatives of general formula (I), or their dimers of general formula (II) and (III), or mixtures thereof



wherein:

R_1 and R'_1 , equal or different between each other, are selected from the group consisting of H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, cycloalkyl, aryl, heterocycle, aryl C_{1-8} alkyl; heterocycle C_{1-8} alkyl, RR'_1N-C_{1-8} alkyl, RR'_1N -aryl, Fmoc NR'_1 -aryl, Boc NR'_1 -aryl, Cbz NR'_1 -aryl, RO-aryl, $R(O)C$ -aryl, $RO(O)C$ -aryl, $RR'_1N(O)C$ -aryl; Fmoc NR'_1-C_{1-8} alkyl, Boc NR'_1-C_{1-8} alkyl, Cbz NR'_1-C_{1-8} alkyl, Fmoc NR'_1-C_{1-8} aryl, Boc NR'_1-C_{1-8} aryl and Cbz NR'_1-C_{1-8} aryl,

R_2 and R'_2 , equal or different between each other, are selected from the group consisting of H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, cycloalkyl, aryl, aryl C_{1-8} alkyl, heterocycle C_{1-8} alkyl, amino C_{1-8} alkyl, aminoaryl, C_{1-8} alkyloxyaryl, hydroxyaryl, hydroxy C_{1-8} alkyl, carboxy C_{1-8} alkyl, methyloxycarbonyl C_{1-8} alkyl, carboxyaryl, carboalkyloxyaryl, alkylcarbamoylaryl and -(side chains of amino acids), or R_1 and R_2 , taken together, and R'_1 and R'_2 , taken together, are C_{1-4} alkyl, C_{2-4} alkenyl, cycloalkyl or benzofused cycloalkyl, to form a bridge of 3, 4, 5, 6 terms,

R_3 and R'_3 are selected from the group consisting of H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, cycloalkyl, aryl, aryl C_{1-8} alkyl, heterocycle C_{1-8} alkyl, RR'_3NC_{1-8} alkyl, RR'_3N aryl, RO- C_{1-8} alkyl, $RO(O)C-C_{1-8}$ alkyl, $R(O)C-C_{1-8}$ alkyl, $RC(O)O-C_{1-8}$ alkyl, $RC(O)N(R)C_{1-8}$ alkyl, RO-aryl, $RO(O)C$ -aryl, $R(O)C$ -aryl $RC(O)O$ -aryl, $RC(O)N(R)$ aryl, -CH(amino acid side-chain) CO_2R , -CH(amino acid side-chain) $C(O)NR$, -CH(CO_2R)- amino acid side-chain, CH(CON RR'_3)- amino acid side-chain, Fmoc, Boc and Cbz,

R_4 , R'_4 , R_5 , and R'_5 , equal or different amongst each other, are selected from the group consisting of

H, C₁₋₈alkyl, C₂₋₈alkenyl, C₂₋₈alkynyl, cycloalkyl, aryl, heterocycle, arylC₁₋₈alkyl and heterocycleC₁₋₈alkyl,

R₆ is selected from the group consisting of H, C₁₋₈alkyl, C₂₋₈alkenyl, C₂₋₈alkynyl, cycloalkyl, aryl, arylC₁₋₈alkyl, heterocycle, heterocycleC₁₋₈alkyl; -C(O)R, -C(O)OR, -C(O)NRR', CH₂OR, CH₂NRR', -C(O)NH-CH(amino acid side-chain)C(O)OR, CH₂NR-Fmoc, CH₂NR-Boc and CH₂NR-CBz,

R and R', equal or different between each other, are selected from the group consisting of H, C₁₋₈alkyl, C₂₋₈alkenyl, C₂₋₈alkynyl, cycloalkyl, aryl, heterocycle, arylC₁₋₈alkyl; heterocycleC₁₋₈alkyl; protecting group, -C(O)CH-(amino acid side-chain)-NHT, -NH-CH(amino acid side-chain)COOT and -CH(amino acid side-chain)COOT,

where T is selected from between H and C₁₋₈alkyl;

X and X', equal or different between each other, are selected from between O and S, when *a* is a double bond, or

X and X' are both H, when *a* is a single bond,

Y and Z, equal or different from each other, are selected from the group consisting of O, S, SO, SO₂ and N-R, wherein R is as above defined;

Q is selected from the group consisting of C=O, CH₂, CO-NH-CH (amino acid side-chain)-CO, CONR(CH₂)_nCO, CONR-C₂₋₈alkenyl-CO C(O)O(CH₂)_nCO, CH₂OC(O)(CH₂)_nCO, and CH₂NRC(O)(CH₂)_nCO, wherein n is comprised between 2 and 6, and R is as above defined,

Q' is selected from the group consisting of C(O)OCH₂, C(O)NRCH₂, CH₂OC(O), CH₂NRC(O), CONR(CH₂)_nNRCO, CONR-C₂₋₈alkenyl-NRCO, C(O)O(CH₂)_nNRCO, CONR(CH₂)_nOC(O), CH₂OC(O)(CH₂)_nOC(O)CH₂, CH₂NRC(O)(CH₂)_nNRC(O)CH₂, CH₂OC(O)(CH₂)_nNRC(O)CH₂, CH₂NRC(O)(CH₂)_nOC(O)CH₂, CH₂NR(CH₂)_nNRCH₂, CH₂O(CH₂)_nOCH₂, CH₂O(CH₂)_nNRCH₂, and CH₂NR(CH₂)_nOCH₂, wherein n is comprised between 2 and 6, and R is as above defined,

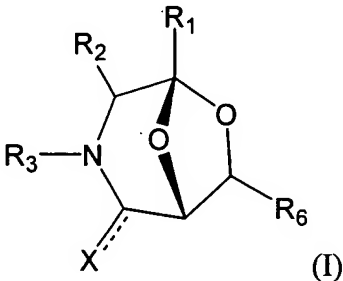


and where the groups alkyl, alkenyl, alkynyl, cycloalkyl, aryl and the heterocyclic groups above reported, are possibly substituted;

wherein said pharmaceutical composition is for use in the treatment of diseases in which neurotrophine functions are involved in defect.




23. (Previously Presented) The pharmaceutical composition according to claim 22, wherein in 3-aza-bicyclo[3.2.1]octane derivatives of formula (I) and in their dimers of formula (II) Z is O.

24. (Previously Presented) The pharmaceutical composition according to claim 22, wherein the alkyl, alkenyl, alkynyl, cycloalkyl, aryl and heterocyclic groups may be substituted with one or more moieties chosen from the group consisting of halogen, cyano, nitro, amino, hydroxy, carboxylic acid, carbonyl and C₁₋₆ alkyl.

25. (Currently Amended) The pharmaceutical composition according to claim 22, wherein the 3-aza-bicyclo[3.2.1]octane derivatives of formula (I) and their dimers of formula (II) and (III) are selected from the compounds having the following formulas:

 <p style="text-align: center;">(I)</p>					
Compound	X	R ₁	R ₂	R ₃	R ₆
1	O	H	H	PhCH ₂	(<i>R</i>) -CO ₂ Me
2	O	H	H	PhCH ₂	(<i>S</i>) -CO ₂ Me
3	O	H	H	PhCH ₂	(<i>R</i>)-CON 
4	O	H	H	PhCH ₂	(<i>R</i>)-CON 
5	O	H	(<i>S</i>) -Me	PhCH ₂	(<i>R</i>) -CO ₂ Me
6	O	H	(<i>S</i>) -Me	PhCH ₂	(<i>S</i>) -CO ₂ Me

7	O	H	(<i>R</i>) -Me	PhCH ₂	(<i>R</i>) -CO ₂ Me
8	O	H	(<i>R</i>) -Me	PhCH ₂	(<i>S</i>) -CO ₂ Me
9	O	H	(<i>R</i>) -CH ₂ Ph	PhCH ₂	(<i>S</i>) -CO ₂ Me
10	O	H	(<i>R</i>) -CH ₂ Ph	PhCH ₂	(<i>R</i>) -CO ₂ Me
11	O	H	(<i>S</i>) -CH ₂ Ph	PhCH ₂	(<i>S</i>) -CO ₂ Me
12	O	H	(<i>S</i>) -CH ₂ Ph	PhCH ₂	(<i>R</i>) -CO ₂ Me
13	O	H	(<i>S</i>)-CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
14	O	H	(<i>S</i>)-CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
15	O	H	(<i>R</i>)-CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
16	O	H	(<i>R</i>)-CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
17	O	H	(<i>S</i>)-CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
18	O	H	(<i>S</i>)-CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
19	O	H	(<i>R</i>)-CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
20	O	H	(<i>R</i>)-CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
21	O	H	=CH ₂	PhCH ₂	(<i>R</i>) -CO ₂ Me
22	O	H	=CH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
23	O	H	(<i>R</i>)-CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
24	S	H	H	PhCH ₂	(<i>R</i>) -CO ₂ Me
25	S	H	H	PhCH ₂	(<i>R</i>)-CONH(CH ₂) ₂ NH ₂
26	S	H	H	PhCH ₂	(<i>R</i>)-CONH(CH ₂) ₂ OH
27	O	Ph	H	PhCH ₂	(<i>R</i>) -CO ₂ Me
28	O	Ph	H	PhCH ₂	(<i>S</i>) -CO ₂ Me
29	O	Ph	H	CH(Ph) ₂	(<i>R</i>) -CO ₂ Me
30	O	Ph	H	CH(Ph) ₂	(<i>S</i>) -CO ₂ Me
31	O	NO ₂ -Ph	H	Ph	(<i>S</i>)-CO₂Me (<i>S</i>)-CO ₂ Me
32	H	H	H	H	(<i>R</i>) -CO ₂ H
33	H	H	H	H	(<i>S</i>) -CO ₂ H

34	H	H	H	H	(R) -CO ₂ Me
35	H	H	H	H	(S) -CO ₂ Me
36	H	H	H	PhCH ₂	(R) -CO ₂ H
37	H	H	H	PhCH ₂	(S) -CO ₂ H
38	H	H	H	Fmoc	(R) -CO ₂ H
39	H	H	H	Fmoc	(S) -CO ₂ H
40	H	H	H	PhCH ₂	(R) -CO ₂ Me
41	H	H	H	PhCH ₂	(S) -CO ₂ Me
42	H	H	H	Boc	(R) -CO ₂ Me
43	H	H	H	Boc	(S) -CO ₂ Me
44	H	H	H	Fmoc	(R) -CO ₂ Me
45	H	H	H	Fmoc	(S) -CO ₂ Me
46	H	H	H	H	(R) -CONHMe
47	H	H	H	H	(S) -CONHMe
48	H	H	H	Ac	(R) -CONHMe
49	H	H	H	Ac	(S) -CONHMe
50	H	H	H	PhCH ₂	(R) -CONHMe
51	H	H	H	PhCH ₂	(S) -CONHMe
52	H	H	H	Fmoc	(R) -CONHMe
53	H	H	H	Fmoc	(S) -CONHMe
54	H	H	H	PhCH ₂	(R)-CON 
55	H	H	H	PhCH ₂	(R) -CONH 
56	H	H	H	PhCH ₂	(R) -CON 

57	H	H	H	PhCH ₂	(<i>R</i>)-CONH(CH ₂) ₂ OH
58	H	H	H	H	(<i>R</i>) -CH ₂ OH
59	H	H	H	H	(<i>S</i>) -CH ₂ OH
60	H	H	H	Fmoc	(<i>S</i>) -CH ₂ OH
61	H	H	H	Fmoc	(<i>R</i>) -CH ₂ OH
62	H	H	H	Boc	(<i>R</i>) -CH ₂ OH
63	H	H	H	Boc	(<i>S</i>) -CH ₂ OH
64	H	H	H	PhCH ₂	(<i>R</i>) -CH ₂ OH
65	H	H	H	PhCH ₂	(<i>S</i>) -CH ₂ OH
66	H	H	(<i>S</i>) -CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
67	H	H	(<i>S</i>) -CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
68	H	H	(<i>R</i>) -CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
69	H	H	(<i>R</i>) -CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
70	H	H	(<i>S</i>) -CH ₂ OBn	PhCH ₂	(<i>R</i>) -CH ₂ OH
71	H	H	(<i>S</i>) -CH ₂ OBn	PhCH ₂	(<i>S</i>) -CH ₂ OH
72	H	H	(<i>R</i>) -CH ₂ OBn	PhCH ₂	(<i>R</i>) -CH ₂ OH
73	H	H	(<i>R</i>) -CH ₂ OBn	PhCH ₂	(<i>S</i>) -CH ₂ OH
75	H	H	(<i>S</i>) -COOH	Fmoc	(<i>R</i>) -CO ₂ Me
76	H	H	(<i>S</i>) -COOH	Fmoc	(<i>S</i>) -CO ₂ Me
77	H	H	(<i>R</i>) -COOH	Fmoc	(<i>R</i>) -CO ₂ Me
78	H	H	(<i>R</i>) -COOH	Fmoc	(<i>S</i>) -CO ₂ Me
79	H	H	(<i>S</i>) -CH ₂ OBn	Fmoc	(<i>R</i>) -CO ₂ Me
80	H	H	(<i>S</i>) -CH ₂ OBn	Fmoc	(<i>S</i>) -CO ₂ Me
81	H	H	(<i>R</i>) -CH ₂ OBn	Fmoc	(<i>R</i>) -CO ₂ Me
82	H	H	(<i>R</i>) -CH ₂ OBn	Fmoc	(<i>S</i>) -CO ₂ Me
83	H	H	(<i>S</i>) -CH ₂ OBn	H	(<i>R</i>) -CO ₂ Me
84	H	H	(<i>S</i>) -CH ₂ OBn	H	(<i>S</i>) -CO ₂ Me
85	H	H	(<i>R</i>) -CH ₂ OBn	H	(<i>R</i>) -CO ₂ Me
86	H	H	(<i>R</i>) -CH ₂ OBn	H	(<i>S</i>) -CO ₂ Me

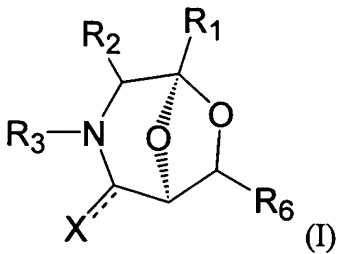
87	H	H	(<i>S</i>) -CH ₂ OH	H	(<i>R</i>) -CO ₂ Me
88	H	H	(<i>S</i>) -CH ₂ OH	H	(<i>S</i>) -CO ₂ Me
89	H	H	(<i>R</i>) -CH ₂ OH	H	(<i>R</i>) -CO ₂ Me
90	H	H	(<i>R</i>) -CH ₂ OH	H	(<i>S</i>) -CO ₂ Me
91	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
92	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
93	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
94	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
95	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
96	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
97	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
98	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
99	H	H	(<i>S</i>) -CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
100	H	H	(<i>R</i>) -CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
101	H	H	(<i>R</i>) -CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
102	H	H	(<i>R</i>) -CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
103	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CH ₂ OH
104	H	H	(<i>S</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CH ₂ OH
105	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>R</i>) -CH ₂ OH
106	H	H	(<i>R</i>) -CH ₂ OH	Fmoc	(<i>S</i>) -CH ₂ OH
107	H	H	(<i>S</i>) -CH ₂ OH	PhCH ₂	(<i>R</i>) -CH ₂ OH
108	H	H	(<i>S</i>) -CH ₂ OH	PhCH ₂	(<i>S</i>) -CH ₂ OH
109	H	H	(<i>R</i>) -CH ₂ OH	PhCH ₂	(<i>R</i>) -CH ₂ OH
110	H	H	(<i>R</i>) -CH ₂ OH	PhCH ₂	(<i>S</i>) -CH ₂ OH
111	H	H	=CH ₂	PhCH ₂	(<i>R</i>) -CO ₂ Me
112	H	H	=CH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
113	H	H	=CH ₂	PhCH ₂	(<i>R</i>) -CH ₂ OH
114	H	H	=CH ₂	PhCH ₂	(<i>S</i>) -CH ₂ OH
115	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>R</i>) -CH ₂ OH

116	H	H	(S)-CH ₂ CH(Me) ₂	PhCH ₂	(S) -CH ₂ OH
117	H	H	(S)-CH ₂ CH(Me) ₂	H	(R) -CH ₂ OH
118	H	Ph	H	H	(R) -CO ₂ Me
119	H	Ph	H	Fmoc	(R) -CO ₂ Me
120	H	Ph	H	PhCH ₂	(R) -CO ₂ Me
121	H	Ph	H	CH(Ph) ₂	(R) -CO ₂ Me
122	H	Ph	H	H	(S) -CO ₂ Me
123	H	Ph	H	Fmoc	(S) -CO ₂ Me
124	H	Ph	H	PhCH ₂	(S) -CO ₂ Me
125	H	Ph	H	CH(Ph) ₂	(S) -CO ₂ Me
126	H	p-NH ₂ -C ₆ H ₄	H	Ph	(S)-COOMe <u>(S)-COOMe</u>
127	H	p-NH ₂ -C ₆ H ₄	H	Ph	(S)-COOH <u>(S)-COOH</u>
128	H	p-NH ₂ -C ₆ H ₄	H	Ph	(S)-CONHCH₂CO₂Me <u>(S)-CONHCH₂CO₂Me</u>
129	H	p-NH- (Asp(O ^t Bu)- NH ₂) C ₆ H ₄	H	Ph	(S)-CO₂Me <u>(S)-CO₂Me</u>
130	H	p-NH- (Asp(O ^t Bu)N H ₂)-C ₆ H ₄	H	Ph	(S)-CO₂H <u>(S)-CO₂H</u>
131	H	p-NH- (Asp(O ^t Bu)- NH ₂) C ₆ H ₄	H	Ph	(S)-CONH- Lys(NHBoc)-OMe <u>(S)-CONH- Lys(NHBoc)-OMe</u>
132	H	p-NH- (Asp(OH)- NH ₂)-C ₆ H ₄	H	Ph	(S)-CONH-Lys-OMe <u>(S)-CONH-Lys-OMe</u>

133	H	p-NO ₂ -C ₆ H ₄	H	Ph	(S)-COOH (S)-COOH
134	H	p-NO ₂ - C ₆ H ₄	H	Ph	(S)-COOMe (S)-COOMe
135	H	p-NO ₂ - C ₆ H ₄	H	Ph	(S)-CONHCH₂CO₂Me (S)-CONHCH ₂ CO ₂ Me
136	H	Ph	H	H	(R) -CH ₂ OH
137	H	Ph	H	Fmoc	(R) -CH ₂ OH
138	H	Ph	H	PhCH ₂	(R) -CH ₂ OH
139	H	Ph	H	CH(Ph) ₂	(R) -CH ₂ OH
140	H	Ph	H	H	(S) -CH ₂ OH
141	H	Ph	H	Fmoc	(S) -CH ₂ OH
142	H	Ph	H	PhCH ₂	(S) -CH ₂ OH
143	H	Ph	H	CH(Ph) ₂	(S) -CH ₂ OH
144	H	H	(S) -Me	Fmoc	(R) -CO ₂ H
145	H	H	(S) -Me	Fmoc	(S) -CO ₂ H
146	H	H	(R) -Me	Fmoc	(R) -CO ₂ H
147	H	H	(R) -Me	Fmoc	(S) -CO ₂ H
148	H	H	(S) -Me	Fmoc	(R) -CO ₂ Me
149	H	H	(S) -Me	Fmoc	(S) -CO ₂ Me
150	H	H	(R) -Me	Fmoc	(R) -CO ₂ Me
151	H	H	(R) -Me	Fmoc	(S) -CO ₂ Me
152	H	H	(S) -Me	PhCH ₂	(R) -CO ₂ Me
153	H	H	(S) -Me	PhCH ₂	(S) -CO ₂ Me
154	H	H	(R) -Me	PhCH ₂	(R) -CO ₂ Me
155	H	H	(R) -Me	PhCH ₂	(S) -CO ₂ Me
156	H	H	(S) -Me	Fmoc	(R) -CH ₂ OH
157	H	H	(S) -Me	Fmoc	(S) -CH ₂ OH
158	H	H	(R) -Me	Fmoc	(R) -CH ₂ OH

159	H	H	(<i>R</i>) -Me	Fmoc	(<i>S</i>) -CH ₂ OH
160	H	H	(<i>S</i>) -Me	PhCH ₂	(<i>R</i>) -CH ₂ OH
161	H	H	(<i>S</i>) -Me	PhCH ₂	(<i>S</i>) -CH ₂ OH
162	H	H	(<i>R</i>) -Me	PhCH ₂	(<i>R</i>) -CH ₂ OH
163	H	H	(<i>R</i>) -Me	PhCH ₂	(<i>S</i>) -CH ₂ OH
164	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ H
165	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ H
166	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ H
167	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ H
168	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ Me
169	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ Me
170	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ Me
171	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ Me
172	H	H	(<i>S</i>) -PhCH ₂	PhCH ₂	(<i>R</i>) -CO ₂ Me
173	H	H	(<i>S</i>) -PhCH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
174	H	H	(<i>R</i>) -PhCH ₂	PhCH ₂	(<i>R</i>) -CO ₂ Me
175	H	H	(<i>R</i>) -PhCH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
176	H	H	(<i>R</i>) -PhCH ₂	H	(<i>R</i>) -CO ₂ Me
177	H	H	(<i>R</i>) -PhCH ₂	H	(<i>S</i>) -CO ₂ Me
178	H	H	(<i>S</i>) -PhCH ₂	H	(<i>R</i>) -CO ₂ Me
179	H	H	(<i>S</i>) -PhCH ₂	H	(<i>S</i>) -CO ₂ Me
180	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CH ₂ OH
181	H	H	(<i>S</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CH ₂ OH
182	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>R</i>) -CH ₂ OH
183	H	H	(<i>R</i>) -PhCH ₂	Fmoc	(<i>S</i>) -CH ₂ OH
184	H	H	(<i>S</i>) -PhCH ₂	PhCH ₂	(<i>R</i>) -CH ₂ OH
185	H	H	(<i>S</i>) -PhCH ₂	PhCH ₂	(<i>S</i>) -CH ₂ OH
186	H	H	(<i>R</i>) -PhCH ₂	PhCH ₂	(<i>R</i>) -CH ₂ OH
187	H	H	(<i>R</i>) -PhCH ₂	PhCH ₂	(<i>S</i>) -CH ₂ OH

188	H	H	(S)-PhCH ₂	PhCH ₂	(R)-COOH <u>(R) -COOH</u>
189	O	p-NO ₂ Ph	H	Ph	CONH(CH ₂) ₆ NH ₂

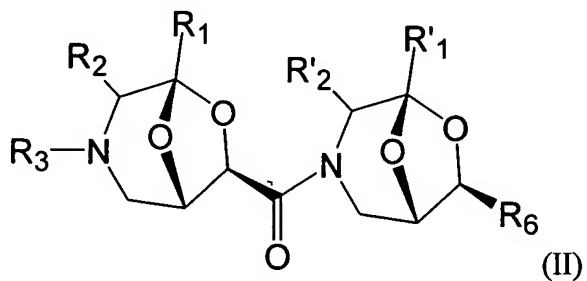
 (I)					
Compound	X	R ₁	R ₂	R ₃	R ₆
190	O	H	H	PhCH ₂	(R) -CO ₂ Me
191	O	H	H	PhCH ₂	(S) -CO₂Me <u>(S) -CO₂Me</u>
192	O	H	(S) -Me	PhCH ₂	(R) -CO ₂ Me
193	O	H	(S) -Me	PhCH ₂	(S) -CO ₂ Me
194	O	H	(R) -Me	PhCH ₂	(R) -CO ₂ Me
195	O	H	(R) -Me	PhCH ₂	(S) -CO ₂ Me
196	O	H	(S) -PhCH ₂	PhCH ₂	(R) -CO ₂ Me
197	O	H	(S) -PhCH ₂	PhCH ₂	(S) -CO ₂ Me
198	O	H	(R) -PhCH ₂	PhCH ₂	(R) -CO ₂ Me
199	O	H	(R) -PhCH ₂	PhCH ₂	(S) -CO ₂ Me
200	O	H	(S) -CH ₂ CH(Me) ₂	PhCH ₂	(R) -CO ₂ Me
201	O	H	(S) -CH ₂ CH(Me) ₂	PhCH ₂	(S) -CO ₂ Me
202	O	H	(R) -CH ₂ CH(Me) ₂	PhCH ₂	(R) -CO ₂ Me
203	O	H	(R) -CH ₂ CH(Me) ₂	PhCH ₂	(S) -CO ₂ Me
204	O	H	H	PhCH ₂	(R) -CONHMe
205	O	H	H	PhCH ₂	(S) -CONHMe
206	O	H	(S) -Me	PhCH ₂	(R) -CONHMe
207	O	H	(S) -Me	PhCH ₂	(S) -CONHMe

208	O	H	(<i>R</i>)-Me	PhCH ₂	(<i>R</i>)-CONHMe
209	O	H	(<i>R</i>)-Me	PhCH ₂	(<i>S</i>)-CONHMe
210	O	H	(<i>S</i>)-PhCH ₂	PhCH ₂	(<i>R</i>)-CONHMe
211	O	H	(<i>S</i>)-PhCH ₂	PhCH ₂	(<i>S</i>)-CONHMe
212	O	H	(<i>R</i>)-PhCH ₂	PhCH ₂	(<i>R</i>)-CONHMe
213	O	H	(<i>R</i>)-PhCH ₂	PhCH ₂	(<i>S</i>)-CONHMe
214	O	H	(<i>S</i>)-CH ₂ CH(Me) ₂	PhCH ₂	(<i>R</i>)-CONHMe
215	O	H	(<i>S</i>)-CH ₂ CH(Me) ₂	PhCH ₂	(<i>S</i>)-CONHMe
216	O	H	(<i>R</i>)-CH ₂ CH(Me) ₂	PhCH ₂	(<i>R</i>)-CONHMe
217	O	H	(<i>R</i>)-CH ₂ CH(Me) ₂	PhCH ₂	(<i>S</i>)-CONHMe
218	H	H	H	Fmoc	(<i>R</i>)-CO ₂ H
219	H	H	H	Fmoc	(<i>R</i>)-CO ₂ Me
220	H	H	H	Fmoc	(<i>S</i>)-CO ₂ H
221	H	H	H	Fmoc	(<i>S</i>)-CO ₂ Me
222	H	H	(<i>S</i>)-Me	Fmoc	(<i>R</i>)-CO ₂ H
223	H	H	(<i>S</i>)-Me	Fmoc	(<i>R</i>)-CO ₂ Me
224	H	H	(<i>S</i>)-Me	PhCH ₂	(<i>R</i>)-CO ₂ Me
225	H	H	(<i>R</i>)-Me	Fmoc	(<i>R</i>)-CO ₂ H
226	H	H	(<i>R</i>)-Me	Fmoc	(<i>R</i>)-CO ₂ Me
227	H	H	(<i>R</i>)-Me	PhCH ₂	(<i>R</i>)-CO ₂ Me
228	H	H	(<i>S</i>)-Me	Fmoc	(<i>S</i>)-CO ₂ H
229	H	H	(<i>S</i>)-Me	Fmoc	(<i>S</i>)-CO ₂ Me
230	H	H	(<i>S</i>)-Me	PhCH ₂	(<i>S</i>)-CO ₂ Me
231	H	H	(<i>R</i>)-Me	Fmoc	(<i>S</i>)-CO ₂ H
232	H	H	(<i>R</i>)-Me	Fmoc	(<i>S</i>)-CO ₂ Me
233	H	H	(<i>R</i>)-Me	PhCH ₂	(<i>S</i>)-CO ₂ Me
234	H	H	(<i>S</i>)-PhCH ₂	Fmoc	(<i>R</i>)-CO ₂ H
235	H	H	(<i>S</i>)-PhCH ₂	Fmoc	(<i>R</i>)-CO ₂ Me
236	H	H	(<i>S</i>)-PhCH ₂	PhCH ₂	(<i>R</i>)-CO ₂ Me

237	H	H	(<i>R</i>)- PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ H
238	H	H	(<i>R</i>)- PhCH ₂	Fmoc	(<i>R</i>) -CO ₂ Me
239	H	H	(<i>R</i>)- PhCH ₂	PhCH ₂	(<i>R</i>) -CO ₂ Me
240	H	H	(<i>S</i>)- PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ H
241	H	H	(<i>S</i>)- PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ Me
242	H	H	(<i>S</i>)- PhCH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
243	H	H	(<i>R</i>)- PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ H
244	H	H	(<i>R</i>)- PhCH ₂	Fmoc	(<i>S</i>) -CO ₂ Me
245	H	H	(<i>R</i>)- PhCH ₂	PhCH ₂	(<i>S</i>) -CO ₂ Me
246	H	H	(<i>R</i>)- CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
247	H	H	(<i>R</i>)- CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
248	H	H	(<i>R</i>)- CH ₂ OBn	Fmoc	(<i>S</i>) -CO ₂ Me
249	H	H	(<i>R</i>)- CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
250	H	H	(<i>R</i>)- CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
251	H	H	(<i>R</i>)- CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
252	H	H	(<i>R</i>)- CH ₂ OBn	Fmoc	(<i>R</i>) -CO ₂ Me
253	H	H	(<i>R</i>)- CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
254	H	H	(<i>S</i>)- CH ₂ OH	Fmoc	(<i>S</i>) -CO ₂ Me
255	H	H	(<i>S</i>)- CH ₂ OH	PhCH ₂	(<i>S</i>) -CO ₂ Me
256	H	H	(<i>S</i>)- CH ₂ OBn	Fmoc	(<i>S</i>) -CO ₂ Me
257	H	H	(<i>S</i>)- CH ₂ OBn	PhCH ₂	(<i>S</i>) -CO ₂ Me
258	H	H	(<i>S</i>)- CH ₂ OH	Fmoc	(<i>R</i>) -CO ₂ Me
259	H	H	(<i>S</i>)- CH ₂ OH	PhCH ₂	(<i>R</i>) -CO ₂ Me
260	H	H	(<i>S</i>)- CH ₂ OBn	Fmoc	(<i>R</i>) -CO ₂ Me
261	H	H	(<i>S</i>)- CH ₂ OBn	PhCH ₂	(<i>R</i>) -CO ₂ Me
262	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Bn	(<i>R</i>) -CO ₂ Me
263	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Bn	(<i>R</i>) -CO ₂ Me
264	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Bn	(<i>S</i>) -CO ₂ Me
265	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Bn	(<i>S</i>) -CO ₂ Me

266	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>R</i>) -CO ₂ Me
267	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>R</i>) -CO ₂ Me
268	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>S</i>) -CO ₂ Me
269	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>S</i>) -CO ₂ Me
270	H	H	(<i>S</i>)-Me	H	(<i>R</i>) -CH ₂ OH
271	H	H	(<i>S</i>)-Me	Bn	(<i>R</i>) -CH ₂ OH
272	H	H	(<i>S</i>)-Me	Fmoc	(<i>R</i>) -CH ₂ OH
273	H	H	(<i>R</i>)-Me	H	(<i>R</i>) -CH ₂ OH
274	H	H	(<i>R</i>)-Me	Bn	(<i>R</i>) -CH ₂ OH
275	H	H	(<i>R</i>)-Me	Fmoc	(<i>R</i>) -CH ₂ OH
276	H	H	(<i>S</i>)-Me	H	(<i>S</i>) -CH ₂ OH
277	H	H	(<i>S</i>)-Me	Bn	(<i>S</i>) -CH ₂ OH
278	H	H	(<i>S</i>)-Me	Fmoc	(<i>S</i>) -CH ₂ OH
279	H	H	(<i>R</i>)-Me	H	(<i>S</i>) -CH ₂ OH
280	H	H	(<i>R</i>)-Me	Bn	(<i>S</i>) -CH ₂ OH
281	H	H	(<i>R</i>)-Me	Fmoc	(<i>S</i>) -CH ₂ OH
282	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	H	(<i>R</i>) -CH ₂ OH
283	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Bn	(<i>R</i>) -CH ₂ OH
284	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>R</i>) -CH ₂ OH
285	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	H	(<i>R</i>) -CH ₂ OH
286	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Bn	(<i>R</i>) -CH ₂ OH
287	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>R</i>) -CH ₂ OH
288	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	H	(<i>S</i>) -CH ₂ OH
289	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Bn	(<i>S</i>) -CH ₂ OH
290	H	H	(<i>S</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>S</i>) -CH ₂ OH
291	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	H	(<i>S</i>) -CH ₂ OH
292	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Bn	(<i>S</i>) -CH ₂ OH
293	H	H	(<i>R</i>)-CH ₂ CH(Me) ₂	Fmoc	(<i>S</i>) -CH ₂ OH
294	H	H	(<i>S</i>) -PhCH ₂	H	(<i>R</i>) -CH ₂ OH

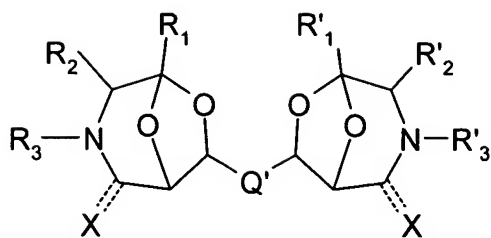
295	H	H	(<i>S</i>)-PhCH ₂	Bn	(<i>R</i>)-CH ₂ OH
296	H	H	(<i>S</i>)-PhCH ₂	Fmoc	(<i>R</i>)-CH ₂ OH
297	H	H	(<i>R</i>)-PhCH ₂	H	(<i>R</i>)-CH ₂ OH
298	H	H	(<i>R</i>)-PhCH ₂	Bn	(<i>R</i>)-CH ₂ OH
299	H	H	(<i>R</i>)-PhCH ₂	Fmoc	(<i>R</i>)-CH ₂ OH
300	H	H	(<i>S</i>)-PhCH ₂	H	(<i>S</i>)-CH ₂ OH
301	H	H	(<i>S</i>)-PhCH ₂	Bn	(<i>S</i>)-CH ₂ OH
302	H	H	(<i>S</i>)-PhCH ₂	Fmoc	(<i>S</i>)-CH ₂ OH
303	H	H	(<i>R</i>)-PhCH ₂	H	(<i>S</i>)-CH ₂ OH
304	H	H	(<i>R</i>)-PhCH ₂	Bn	(<i>S</i>)-CH ₂ OH
305	H	H	(<i>R</i>)-PhCH ₂	Fmoc	(<i>S</i>)-CH ₂ OH
306	H	H	(<i>R</i>)-CH ₂ OH	Fmoc	(<i>S</i>)-CH ₂ OH
307	H	H	(<i>R</i>)-CH ₂ OH	PhCH ₂	(<i>S</i>)-CH ₂ OH
308	H	H	(<i>R</i>)-CH ₂ OBn	Fmoc	(<i>S</i>)-CH ₂ OH
309	H	H	(<i>R</i>)-CH ₂ OBn	PhCH ₂	(<i>S</i>)-CH ₂ OH
310	H	H	(<i>R</i>)-CH ₂ OH	Fmoc	(<i>R</i>)-CH ₂ OH
311	H	H	(<i>R</i>)-CH ₂ OH	PhCH ₂	(<i>R</i>)-CH ₂ OH
312	H	H	(<i>R</i>)-CH ₂ OBn	Fmoc	(<i>R</i>)-CH ₂ OH
313	H	H	(<i>R</i>)-CH ₂ OBn	PhCH ₂	(<i>R</i>)-CH ₂ OH
314	H	H	(<i>S</i>)-CH ₂ OH	Fmoc	(<i>S</i>)-CH ₂ OH
315	H	H	(<i>S</i>)-CH ₂ OH	PhCH ₂	(<i>S</i>)-CH ₂ OH
316	H	H	(<i>S</i>)-CH ₂ OBn	Fmoc	(<i>S</i>)-CH ₂ OH
317	H	H	(<i>S</i>)-CH ₂ OBn	PhCH ₂	(<i>S</i>)-CH ₂ OH
318	H	H	(<i>S</i>)-CH ₂ OH	Fmoc	(<i>R</i>)-CH ₂ OH
319	H	H	(<i>S</i>)-CH ₂ OH	PhCH ₂	(<i>R</i>)-CH ₂ OH
320	H	H	(<i>S</i>)-CH ₂ OBn	Fmoc	(<i>R</i>)-CH ₂ OH
321	H	H	(<i>S</i>)-CH ₂ OBn	PhCH ₂	(<i>R</i>)-CH ₂ OH



Compound	R ₁	R ₂	R ₃	R' ₁	R' ₂	R ₆
322	H	H	H	H	H	CO ₂ Me
323	H	H	H	H	H	CONHMe
324	H	H	PhCH ₂	H	H	CO ₂ Me
325	H	H	PhCH ₂	H	H	CONHMe
326	H	H	Fmoc	H	H	CO ₂ Me
327	H	H	Fmoc	H	H	CONHMe
328	H	H	Boc	H	H	CO ₂ Me
329	H	H	Boc	H	H	CONHMe
330	H	PhCH ₂	H	H	H	CO ₂ Me
331	H	PhCH ₂	H	H	H	CONHMe
332	H	PhCH ₂	PhCH ₂	H	H	CO ₂ Me
333	H	PhCH ₂	PhCH ₂	H	H	CONHMe
334	H	PhCH ₂	Fmoc	H	H	CO ₂ Me
335	H	PhCH ₂	Fmoc	H	H	CONHMe
336	H	PhCH ₂	Boc	H	H	CO ₂ Me
337	H	PhCH ₂	Boc	H	H	CONHMe
338	H	H	H	H	PhCH ₂	CO ₂ Me
339	H	H	H	H	PhCH ₂	CONHMe
340	H	H	PhCH ₂	H	PhCH ₂	CO ₂ Me
341	H	H	PhCH ₂	H	PhCH ₂	CONHMe
342	H	H	Fmoc	H	PhCH ₂	CO ₂ Me
343	H	H	Fmoc	H	PhCH ₂	CONHMe

344	H	H	Boc	H	PhCH ₂	CO ₂ Me
345	H	H	Boc	H	PhCH ₂	CONHMe
346	H	PhCH ₂	H	H	PhCH ₂	CO ₂ Me
347	H	PhCH ₂	H	H	PhCH ₂	CONHMe
348	H	PhCH ₂	PhCH ₂	H	PhCH ₂	CO ₂ Me
349	H	PhCH ₂	PhCH ₂	H	PhCH ₂	CONHMe
350	H	PhCH ₂	Fmoc	H	PhCH ₂	CO ₂ Me
351	H	PhCH ₂	Fmoc	H	PhCH ₂	CONHMe
352	H	PhCH ₂	Boc	H	PhCH ₂	CO ₂ Me
353	H	PhCH ₂	Boc	H	PhCH ₂	CONHMe
354	Ph	H	H	H	H	CO ₂ Me
355	Ph	H	H	H	H	CONHMe
356	Ph	H	PhCH ₂	H	H	CO ₂ Me
357	Ph	H	PhCH ₂	H	H	CONHMe
358	Ph	H	Fmoc	H	H	CO ₂ Me
359	Ph	H	Fmoc	H	H	CONHMe
360	Ph	H	Boc	H	H	CO ₂ Me
361	Ph	H	Boc	H	H	CONHMe
362	H	H	H	Ph	H	CO ₂ Me
363	H	H	H	Ph	H	CONHMe
364	H	H	PhCH ₂	Ph	H	CO ₂ Me
365	H	H	PhCH ₂	Ph	H	CONHMe
366	H	H	Fmoc	Ph	H	CO ₂ Me
367	H	H	Fmoc	Ph	H	CONHMe
368	H	H	Boc	Ph	H	CO ₂ Me
369	H	H	Boc	Ph	H	CONHMe
370	Ph	H	H	Ph	H	CO ₂ Me
371	Ph	H	H	Ph	H	CONHMe
372	Ph	H	PhCH ₂	Ph	H	CO ₂ Me

373	Ph	H	PhCH ₂	Ph	H	CONHMe
374	Ph	H	Fmoc	Ph	H	CO ₂ Me
375	Ph	H	Fmoc	Ph	H	CONHMe
376	Ph	H	Boc	Ph	H	CO ₂ Me
377	Ph	H	Boc	Ph	H	CONHMe
378	H	H	H	H	CH ₂ OH	CO ₂ Me
379	H	H	H	H	CH ₂ OH	CONHMe
380	H	H	PhCH ₂	H	CH ₂ OH	CO ₂ Me
381	H	H	PhCH ₂	H	CH ₂ OH	CONHMe
382	H	H	Fmoc	H	CH ₂ OH	CO ₂ Me
383	H	H	Fmoc	H	CH ₂ OH	CONHMe
384	H	H	Boc	H	CH ₂ OH	CO ₂ Me
385	H	H	Boc	H	CH ₂ OH	CONHMe
386	H	PhCH ₂	H	H	CH ₂ OH	CO ₂ Me
387	H	PhCH ₂	H	H	CH ₂ OH	CONHMe
388	H	PhCH ₂	PhCH ₂	H	CH ₂ OH	CO ₂ Me
389	H	PhCH ₂	PhCH ₂	H	CH ₂ OH	CONHMe
390	H	PhCH ₂	Fmoc	H	CH ₂ OH	CO ₂ Me
391	H	PhCH ₂	Fmoc	H	CH ₂ OH	CONHMe
392	H	PhCH ₂	Boc	H	CH ₂ OH	CO ₂ Me
393	H	PhCH ₂	Boc	H	CH ₂ OH	CONHMe
394	Ph	H	H	H	CH ₂ OH	CO ₂ Me
395	Ph	H	H	H	CH ₂ OH	CONHMe
396	Ph	H	PhCH ₂	H	CH ₂ OH	CO ₂ Me
397	Ph	H	PhCH ₂	H	CH ₂ OH	CONHMe
398	Ph	H	Fmoc	H	CH ₂ OH	CO ₂ Me
399	Ph	H	Fmoc	H	CH ₂ OH	CONHMe
400	Ph	H	Boc	H	CH ₂ OH	CO ₂ Me
401	Ph	H	Boc	H	CH ₂ OH	CONHMe



(III)

Compound	R ₁	R ₂	R ₃	R' ₁	R' ₂	R ₃	X	Q'
402	H	H	H	H	H	H	O	CO-NH(CH ₂) ₂ NH-CO
403	H	H	H	H	H	H	O	CO-NH(CH ₂) ₄ NH-CO
404	H	H	H	H	H	H	O	CO-NH(CH ₂) ₆ NH-CO
405	H	H	H	H	H	H	O	CO-N(C ₂ H ₄)N-CO
406	H	H	PhCH ₂	H	H	PhCH ₂	O	CO-NH(CH ₂) ₂ NH-CO
407	H	H	PhCH ₂	H	H	PhCH ₂	O	CO-NH(CH ₂) ₄ NH-CO
408	H	H	PhCH ₂	H	H	PhCH ₂	O	CO-NH(CH ₂) ₆ NH-CO
409	H	H	PhCH ₂	H	H	PhCH ₂	O	CO-N(C ₂ H ₄)N-CO
410	H	H	PhCH ₂	H	H	PhCH ₂	H	CO-NH(CH ₂) ₂ NH-CO
411	H	H	PhCH ₂	H	H	PhCH ₂	H	CO-NH(CH ₂) ₄ NH-CO
412	H	H	PhCH ₂	H	H	PhCH ₂	H	CO-NH(CH ₂) ₆ NH-CO
413	H	H	PhCH ₂	H	H	PhCH ₂	H	CO-N(C ₂ H ₄)N-CO
414	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	O	CO-NH(CH ₂) ₂ NH-CO
415	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	O	CO-NH(CH ₂) ₄ NH-CO
416	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	O	CO-NH(CH ₂) ₆ NH-CO
417	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	O	CO-N(C ₂ H ₄)N-CO
418	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	H	CO-NH(CH ₂) ₂ NH-CO
419	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	H	CO-NH(CH ₂) ₄ NH-CO
420	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	H	CO-NH(CH ₂) ₆ NH-CO
421	H	PhCH ₂	PhCH ₂	H	PhCH ₂	PhCH ₂	H	CO-N(C ₂ H ₄)N-CO
422	Ph	H	PhCH ₂	Ph	H	PhCH ₂	O	CO-NH(CH ₂) ₂ NH-CO

423	Ph	H	PhCH ₂	Ph	H	PhCH ₂	O	CO-NH(CH ₂) ₄ NH-CO
424	Ph	H	PhCH ₂	Ph	H	PhCH ₂	O	CO-NH(CH ₂) ₆ NH-CO
425	Ph	H	PhCH ₂	Ph	H	PhCH ₂	O	CO-N(C ₂ H ₄)N-CO
426	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₂ NH-CO
427	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₄ NH-CO
428	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₆ NH-CO
429	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-N(C ₂ H ₄)N-CO
430	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₂ NH-CO
431	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₄ NH-CO
432	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-NH(CH ₂) ₆ NH-CO
433	Ph	H	PhCH ₂	Ph	H	PhCH ₂	H	CO-N(C ₂ H ₄)N-CO
434	Ph	H	Ph	Ph	H	Ph	O	CO-NH(CH ₂) ₂ NH-CO
435	Ph	H	Ph	Ph	H	Ph	O	CO-NH(CH ₂) ₄ NH-CO
436	Ph	H	Ph	Ph	H	Ph	O	CO-NH(CH ₂) ₆ NH-CO
437	Ph	H	Ph	Ph	H	Ph	O	CO-N(C ₂ H ₄)N-CO
438	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₂ NH-CO
439	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₃ NH-CO
440	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₄ NH-CO
441	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₅ NH-CO
442	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₆ NH-CO
443	NO ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-N(C ₂ H ₄)N-CO
444	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₂ NH-CO
445	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₃ NH-CO
446	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₄ NH-CO
447	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₅ NH-CO
448	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-NH(CH ₂) ₆ NH-CO
449	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	O	CO-N(C ₂ H ₄)N-CO
450	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₂ NH-CO
451	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₃ NH-CO

452	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₄ NH-CO
453	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₅ NH-CO
454	NO ₂ -Ph	H	Ph	NO ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₆ NH-CO
455	NO ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-N(C ₂ H ₄)N-CO
456	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₂ NH-CO
457	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₃ NH-CO
458	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₄ NH-CO
459	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₅ NH-CO
460	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-NH(CH ₂) ₆ NH-CO
461	NH ₂ -Ph	H	Ph	NH ₂ -Ph	H	Ph	H	CO-N(C ₂ H ₄)N-CO

26. (Previously Presented) The pharmaceutical composition according to claim 22, further comprising pharmaceutically acceptable excipients and/or diluents.

27. (Withdrawn) A method of treating:

- i) neurodegenerative, inflammatory, toxic, traumatic, or vascular disorders of the central, peripheral, or autonomic nervous system, neural damages secondary to hypoxia, ischaemia, burns, chemotherapy, toxic compounds of various origin (including alcohol), infections, trauma (including surgical trauma) originating axotomy of motoneurons, sensorial, motor, or sensorimotor neuropathies, or autonomic dysfunctions secondary to diverse pathologies, genetic disorders, nervous pathologies of diverse origin, some ocular pathologies, corneal diseases of diverse origin, pathologies from reduced motility of the gastro-intestinal tract or from urinary bladder atony, endocrine neoplastic pathologies, clinical conditions in which stimulation of learning processes is advantageous, and all pathological conditions originating from apoptotic processes of neural cells;
- ii) acquired immunodeficiency diseases due to reduced or absent bioavailability of NGF;
- iii) conditions in which stimulation of neoangiogenesis may be advantageous;
- iv) certain ocular pathologies,

said method comprising administering to a patient in need of such a treatment a pharmaceutical composition comprising as active principle at least one among the 3-aza-bicyclo[3.2.1]octane derivatives of general formula (I), or their dimers of general formula (II) and (III), or mixtures thereof as defined in claim 22.

28. (Withdrawn) The method according to claim 27, in which said neurodegenerative, inflammatory, toxic, traumatic, or vascular disorders of the central, peripheral, or autonomic nervous system are selected from Alzheimer Disease (AD), Amyotrophic Lateral Sclerosis (ALS), Huntington disease, multiple sclerosis, epilepsy, Down syndrome, nervous deafness and Ménière's disease.

29. (Withdrawn) The method according to claim 27, in which said neural damages secondary to infections are selected from polio and HIV virus.

30. (Withdrawn) The method according to claim 27, in which said genetic disorders are selected from Charcot-Marie-Tooth disease, Refsum disease, abetalipoproteinemia, Tangier disease, Krabbe disease, metachromatic leukodystrophy, Fabry disease, Dejerine-Sottas disease.

31. (Withdrawn) The method according to claim 27, in which said nervous pathologies of diverse origin are selected from diffuse atrophy of cerebral cortex, Lewy body dementia, Pick's disease, mesolimbocortical dementia, neuronal ceroid lipofuscinosis, thalamic degeneration, cortico-striatal-spinal degeneration, cortico-basal ganglionic degeneration, cerebro-cerebellar degeneration, familial dementia with spastic paraparesis, polyglucosan bodies disease, Shy-Drager syndrome, olivopontocerebellar atrophy, progressive supranuclear palsy, deforming muscular dystony, Hallervorden-Spatz disease, Meige's syndrome, familial shivering, Gilles de la Tourette syndrome, chorea-acanthocytosis syndrome, Friedreich's ataxia, Holmes' corticocerebellar familial atrophy, Gerstmann-Straussler-Scheinker disease, progressive spinal muscular atrophy, spastic paraplegia, peroneal muscular atrophy, hypertrophic interstitial polyneuropathy and polyneuritic ataxic heredopathy.

32. (Withdrawn) The method according to claim 27, in which said ocular pathologies are selected from optic nerve neuropathies, retinal degeneration, opthalmoplegy and glaucoma; and said corneal diseases of diverse origin are selected from neurotrophic ulcers, post-traumatic and post-infective corneal disorders.

33. (Withdrawn) The method according to claim 27, in which said pathologies from reduced motility of the gastro-intestinal tract or from urinary bladder atony are selected from interstitial cystitis and diabetic cystitis.

34. (Withdrawn) The method according to claim 27, in which said conditions in which stimulation of neoangiogenesis may be advantageous are selected from myocardial infarction, stroke, cerebral aneurysms, gastro-duodenal ulcers, wound healing and peripheral vasculopathies.

35. (Withdrawn) The method according to claim 27, in which said acquired immunodeficiency disease is immunodeficiency of ageing.

36. (Withdrawn) A method for promoting growth and/or *in vivo*, *in vitro* or *ex vivo* survival of neuronal cells, comprising using as promoting reagents the 3-aza-bicyclo[3.2.1]octane derivatives of formula (I), their dimers of formula (II) or (III) and mixtures thereof as defined in claim 22.

37. (Withdrawn) The method according to claim 36, wherein said neural cells are selected from the group consisting of dopaminergic, cholinergic, sensorial neurons, striatal cells, cortical cells, cells of the corpus striatum, hippocampus, cerebellum, olfactory bulbs, periaqueductal cells, cells of the raphe nuclei, of the locus coeruleus, of the dorsal root ganglia, sympathetic neurons, lower motoneurons, nervous stem cells, and cells anyhow deriving from the neural plaque.

38. (Withdrawn) A process for the preparation of culture and storage media useful for conservation of explanted corneas destined to transplantation, comprising adding to culture and storage media 3-aza-bicyclo[3.2.1]octane derivatives of formula (I), their dimers of formula (II) or (III), or mixtures thereof as defined in claim 22.

39. (Withdrawn) A method for imaging analysis of tissues and organs containing neurotrophine receptors, comprising using 3-aza-bicyclo[3.2.1]octane derivatives of formula (I), their dimers of formula (II) or (III), or mixtures thereof as defined in claim 22, labelled with suitable reagents (contrast agents, radioisotopes, fluorescent agents etc.), and possibly processed with procedures useful for medical imaging purposes.

40. (Withdrawn) The method according to claim 39, for monitoring the use and efficacy of drugs or for the diagnosis of mammal diseases in which the neurotrophine receptors are involved.

41. (Currently Amended) The 3-aza-bicyclo[3.2.1]octane derivatives of formula (I) and their dimers of formula (II) and (III) as defined in claim 22, with the exclusion of the compounds indicated by the following numbers:

1,2,5,7,8,9,10,12,13,17,19,20,21,32,34,35,36,38,40,44,58,60,64,65,66,70,75,76,
77,78,79,83,87,91,95,99,101,103,138,145,152,154,163,164,168,172,174,176,178,184,186,192,322,3
24, and as defined in claim 25; further excluding the compound of formula (I) wherein $Z = Y = O$, $X = R_2 = R_3 = R_4 = R_5 = H$, $R_1 = Me$, and $R_6 = CH_2NMe_2$; the compound of formula (I) wherein $Z=Y=O$, $X=R_1=R_2=R_4=R_5=R_6=H$, and $R_3=Me$; the compound of formula (I) wherein $X=Y=Z=O$, $R_1=R_4=R_5=H$, R_2 is CH_2Ph , R_3 is CH_2PhOMe , and R_6 is $COOMe$; the compound of formula (I) wherein $X=Y=Z=O$, $R_1=Ph$, $R_2=R_4=R_5=H$, R_3 is Me , and R_6 is Ph ; and the compounds of formula (I) wherein R_6 is H .

42. (Previously Presented) The 3-aza-bicyclo[3.2.1]octane derivatives of formula (I) and their dimers of formula (II) and (III) according to claim 41, selected from the compounds indicated by the following numbers:

3,4,6,11,14-16,18,22-31,33,37,39,41-43,45-57,59,61-63,67-69,71-74,80-82,84-86,88-90,92-94,96-98,100,102,104-137,139-144,146-151,153,155-162,165-167,169-171,173,175,177,179-183,185,187-191,193-321,323,325-461, and as defined in claim 25.